

Sears

owners manual

Mailed to Miller 1/26/72

New



REG. TRADEMARK

SANDER DUSTLESS DUAL MOTION DOUBLE INSULATED

MODEL NO.
315.11680

CAUTION:

Read Rules for
Safe Operation
and Instructions
Carefully

- Introduction
- Operation
- Repair Parts



THIS SAFETY SEAL OF THE POWER TOOL INSTITUTE ASSURES YOU:



1. That the manufacturer's power tools, including the particular tool associated with the Seal, are produced in accordance with applicable Standards for Safety of Underwriters' Laboratories and American National Standards (ANSI).
2. That compliance with applicable safety standards is assured by independent inspection and testing conducted by Underwriters' Laboratories (UL).
3. That every motorized tool is inspected under power.
4. That every tool has with it adequate instructions and a list of safety rules for the protection of the user.
5. That the tool manufacturer is a member of the Power Tool Institute and is a sponsor of the Institute's Consumer Safety Education Program.

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Designed exclusively for and sold only by
SEARS, ROEBUCK AND CO.—Chicago, Illinois 60607 U.S.A.
and SIMPSON-SEARS LIMITED—Toronto



GUARANTEE

During the first year, we will repair your Craftsman Portable Electric Tool, free of charge, if defective in material or workmanship.

This guarantee service is available by simply returning the tool to any Sears store throughout the United States or Canada.

SEARS, ROEBUCK AND CO. and SIMPSON-SEARS LTD.

introduction

DOUBLE INSULATION

Double Insulation is a concept in safety, replacing the standard grounded supply system, in electric power tools. The construction of a double insulated tool affords compatible protection to a properly grounded tool without the necessity for using a grounded conductor. The double insulation system eliminates the need for the usual three wire grounded power cord and grounded supply system. Whenever there is electric current in the tool there are two complete sets of insulation to protect the user. All exposed metal parts are isolated from the internal metal motor components with protecting insulation. The lead wires, switch, etc. with their functional insulation have the added protection of non-conductive sleeving or housings to complete the double insulation system.

SERVICING OF A TOOL WITH DOUBLE INSULATION REQUIRES EXTREME CARE AND KNOWLEDGE OF THE SYSTEM AND SHOULD BE PERFORMED ONLY BY A QUALIFIED SERVICE TECHNICIAN. FOR SERVICE WE SUGGEST YOU RE-

TURN THE TOOL TO YOUR NEAREST SEARS STORE FOR REPAIR WHICH WILL BE DONE WITH ORIGINAL FACTORY REPLACEMENT PARTS.

Your sander is suitable for coarse, medium and fine sanding of wood, plasters, metals and plastics. It is ideal when used for leveling wallboard, finishing cabinets and many other general sanding applications. It may also be used as a polisher when using a polishing pad instead of sandpaper. Your sander will produce a fine scratch free finish when used with or against the grain and is designed for sanding flush to corners.

The dual motion feature with which your sander is equipped is ideal for any sanding operation where a pad sander is required. Orbital motion is ideal for fast cutting action when removing old finishes, smoothing rough wood, cutting stock down to required dimensions or for finishing surface to be painted. Straight line is best for fine finish sanding on work to be stained or varnished or for use with a polishing pad.

RULES FOR SAFE OPERATION



1. **KNOW YOUR POWER TOOL** — Read owner's manual carefully. Learn its applications and limitations as well as the specific potential hazards peculiar to this tool.
2. **GROUND ALL TOOLS — UNLESS DOUBLE-INSULATED.** If tool is equipped with three-prong plug, it should be plugged into a three-hole electrical receptacle. If adapter is used to accommodate two-prong receptacle, the adapter wire must be attached to a **known** ground. (Usually the screw securing the receptacle cover plate.) **Never** remove third prong.
3. **KEEP GUARDS IN PLACE** and in working order.
4. **KEEP WORK AREA CLEAN.** Cluttered areas and benches invite accidents.
5. **AVOID DANGEROUS ENVIRONMENT.** Don't use power tool in damp or wet locations. And keep work area well lit.
6. **KEEP CHILDREN AWAY.** All visitors should be kept safe distance from work area.
7. **STORE IDLE TOOLS.** When not in use, tools should be stored in dry, high or locked-up place—out of reach of children.
8. **DON'T FORCE TOOL.** It will do the job better and safer at the rate for which it was designed.
9. **USE RIGHT TOOL.** Don't force small tool or attachment to do the job of a heavy duty tool.
10. **WEAR PROPER APPAREL.** No loose clothing or jewelry to get caught in moving parts. Rubber gloves and footwear are recommended when working outdoors.
11. **USE SAFETY GLASSES** with most tools. Also face or dust mask if cutting operation is dusty.
12. **DON'T ABUSE CORD.** Never carry tool by cord or yank it to disconnect from receptacle. Keep cord from heat, oil and sharp edges.
13. **SECURE WORK.** Use clamps or a vise to hold work. It's safer than using your hand and it frees both hands to operate tool.
14. **DON'T OVERREACH.** Keep proper footing and balance at all times.
15. **MAINTAIN TOOLS WITH CARE.** Keep tools sharp at all times, and clean for best and safest performance. Follow instructions for lubricating and changing accessories.
16. **DISCONNECT TOOLS.** When not in use, before servicing; when changing attachments, blades, bits, cutters, etc.
17. **REMOVE ADJUSTING KEYS AND WRENCHES.** Form habit of checking to see that keys and adjusting wrenches are removed from tool before turning it on.
18. **AVOID ACCIDENTAL STARTING.** Don't carry plugged-in tool with finger on switch.

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CUSTOMER INSTRUCTIONS

1. **DO** read thoroughly INTRODUCTION and OPERATING INSTRUCTIONS before using your SANDER.
2. **DO** be sure switch is in "OFF" position before connecting tool to power supply.
3. **DO** disconnect power cord when cleaning or doing maintenance on tool.
4. **DO** be sure the voltage of the power supply agrees with the data plate marking on the unit.
5. **DO** use correct size extension cord as recommended.
6. **DO** replace both brushes when either is worn to about $\frac{1}{4}$ inch in length.
7. **DO** use only specified replacement parts.
8. **DO** disconnect from power source and store in a clean dry place.
1. **DON'T** use your SANDER before reading thoroughly, INTRODUCTION and OPERATING INSTRUCTIONS.
2. **DON'T** leave Sander unattended before disconnecting from power source.
3. **DON'T** allow the cord near sanding sheet when operating.
4. **DON'T** force tool, allow Sander to perform as it was designed.
5. **DON'T** allow children to operate Sander.
6. **DON'T** carry unit by power cord.
7. **DON'T** plug or cover air vents to keep dust from flying. Vents must be kept open to keep motor cool.
8. **DON'T** engage sanding sheet and workpiece before beginning sanding action or stop sanding action before removing from workpiece.

CAUTION



The operation of any power tool can result in foreign objects being thrown into the eyes, which can result in severe eye damage. Always wear safety glasses or eye shields before commencing power tool operation. We recommend Wide Vision Safety Mask for use over spectacles, or standard safety glasses . . . available at Sears retail or catalog stores.

AVOID USE OF ALL SOLVENTS WHEN CLEANING PLASTIC PARTS. USE CLEAN CLOTHS AND WIPE PARTS AS MUCH AS POSSIBLE TO REMOVE DIRT, CARBON DUST, ETC. MOST PLASTICS ARE SUSCEPTIBLE TO VARIOUS TYPES OF COMMERCIAL SOLVENTS AND MAY BE DAMAGED BY THE USE OF THESE SOLVENTS.

THIS PRODUCT, or any electrical product, requires extreme care when service repairs are made. A dangerous electrical hazard can be created by tampering with the electrical or insulating systems or in the replacement or substitution of repair parts. Repairs should be made only by a qualified technician. If service is required we suggest you return the tool to your nearest Sears store for approved service with original factory replacement parts.

WHEN ELECTRIC TOOLS ARE USED ON FIBER-GLASS boats, sports cars, etc. it has been found that they are subject to accelerated wear and possible premature failure, as the fiberglass chips and grindings are highly abrasive to bearings, brushes, commutator, etc. Consequently it is not recommended that this tool be used for continuous production work on any fiberglass material. During any use on fiberglass it is extremely important that the tool is cleaned frequently by blowing with an air jet.

EXTENSION CORDS—The use of any Extension cord will cause some loss of power. To keep this to a minimum and to prevent overheating and motor burn-out, use the table below to determine the MINIMUM wire size (A.W.G.) Extension Cord.

Extension Cord Length	Wire Size A.W.G.
25-100 Feet	16

Extension cords suitable for use with your Sander are available at your nearest Sears Catalog Order or Retail Store.

Another time saving convenience is a cord-lock offered by Sears which prevents separation of cord. Cord-lock is available at your nearest Sears Retail Store or Catalog Order House.

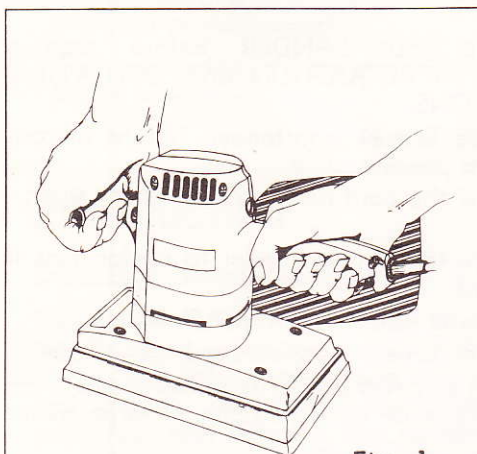


Fig. 1

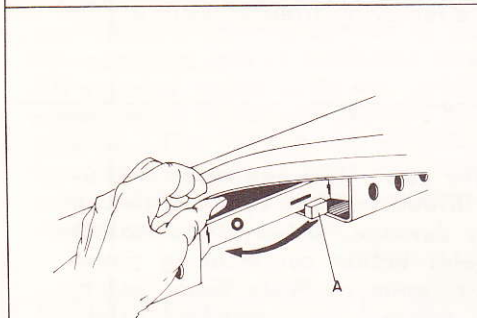


Fig. 2

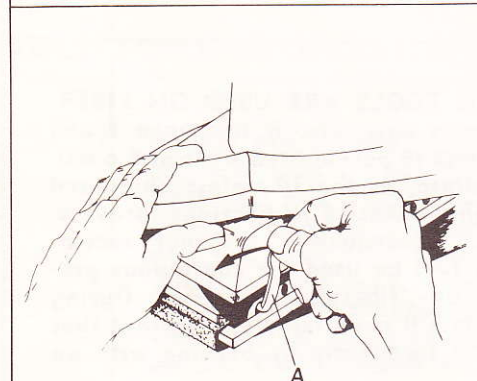


Fig. 3

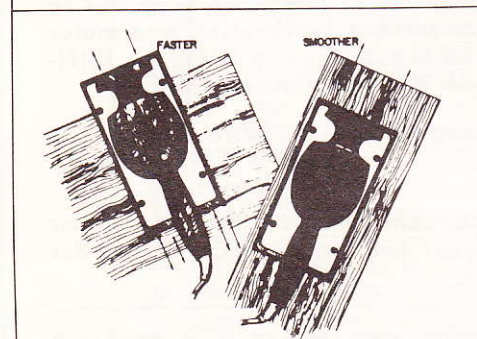


Fig. 4

PREPARING FOR OPERATION

Your sander is equipped with its own built-in auxiliary handle located at the front of the unit. This handle allows for two-hand use which will aid in maintaining complete control and keeping sanding area level with work piece. (See Fig. 1)

Selecting the correct size and type sandpaper is an extremely important step in achieving a high quality sanded finish. Aluminum oxide, silicone carbide and other synthetic abrasives are best for power sanding. Other natural abrasives, such as flint and garnet sandpaper are too soft for economical use in power sanding.

In general, coarse grit will remove the most material and finer grit will produce best finish in all sanding operations. The condition of the surface to be sanded will determine which grit sandpaper will do the job. If the surface is rough, start with a coarse grit paper sanding until surface is uniform. Medium grit paper may then be used to remove scratches left by the coarser paper and finer grit paper used for finishing of the surface. Always continue sanding with each grit paper until surface is uniform.

SETTING MOTION—The dual motion feature of your sander with its readily accessible slide lever for quick, error free motion setting allows required motion for any sanding application. If your particular requirement is fast cutting action for removing old finishes, smoothing rough wood, cutting stock down to required dimensions or for sanding of surfaces to be painted, orbital motion is best suited. **IMPORTANT—BE SURE POWER CORD IS DISCONNECTED FROM POWER SUPPLY.** (See Fig. 2) Slide lever (A) toward the 0 mark on platen as far as possible. Spring action will hold lever at required setting until motion change is required. For fine finish sanding on work to be stained or varnished and for use with polishing pad, straight line motion is ideal. **IMPORTANT—BE SURE POWER CORD IS DISCONNECTED FROM POWER SUPPLY.** (See Fig. 2) Slide lever (A) toward the — mark on platen as far as possible. This motion along with moving the sander with grain, will produce a finish equalled only by a skilled craftsman hand sanding. **DO NOT ATTEMPT CHANGING MOTION SETTING WHILE UNIT IS OPERATING.**

INSTALLING SANDPAPER—**IMPORTANT—BE SURE POWER CORD IS DISCONNECTED FROM POWER SUPPLY.** (See Fig. 3) To remove the worn sandpaper, turn Sander upside down and grasp both ends of the dust skirt with the thumb and fingers of each hand, flex out and draw the skirt down from the platen. The skirt will unlock from the Sander providing access to the paper clamps. Remove the worn sandpaper by raising and opening the paper clamp levers (A) on each side of the platen. To install new paper, set the tool on the sheet with the same amount of paper extending at each end from under the platen. Fold the paper ends up and insert them as far as possible under the paper clamps and close the clamp levers, thus locking the paper in place. The dust skirt should then be returned to its operating position by grasping the ends and by flexing out and drawing the dust skirt down over the platen until it locks into position.

SWITCH—A trigger switch controls "ON-OFF" operation of the Sander. The trigger switch may be locked in the "ON" position for continuous operation. To lock pull trigger to "ON", press lock button inward and release trigger. To stop: pull trigger and release.

TO OPERATE

While holding your sander firmly in front of and clearly away from you, with the sanding surface clear of any foreign material, pull trigger switch starting sanding action. Place the sander gently onto the work and move slowly using forward and backward strokes. **DO NOT FORCE.** The weight of the unit supplies adequate pressure, so let the sanding sheet and sander do the work. Applying additional pressure only slows the motor, rapidly wears sandpaper and greatly reduces speed. Excessive pressure will overload the motor causing possible damage from motor overheating and can result in inferior work as any finish or resin on wood may soften from the frictional heat. Sanding with the grain of wood gives the smoothest finish while sanding against the grain results in faster sanding. (See Fig. 4) The sander can move the length of the entire surface, however, do not allow sanding on one spot too long as its rapid action may remove too much material making the surface uneven. Always remove sander from work piece before releasing switch to stop sanding action.

DUST BAG—Empty the Dust Bag frequently by untying the draw string and shaking out the bag. A large amount of dust or heavy coating on the inside of the bag will slow the movement of the air carrying the dust and make the pick-up lose its effectiveness.

LUBRICATION

All the bearings in this tool are lubricated with a sufficient amount of high grade lubricant for the life of the unit under normal operating conditions, therefore, no further lubrication is required.

After 50 hours use, the platen with cushion, Key No. 53, should be removed by removing the four (4) screws, Key No. 58. The yoke slide, Key No. 51, and slide on platen with cushion should be wiped clean and re-lubricated with a good grade of light grease.

NOTE: The Yoke Slide, Key No. 51, is so designed that when worn it may be rotated 90°, engaging the platen lever in the alternate notch, thereby giving a virtually new part.

BRUSH REPLACEMENT

Periodically check brushes for wear and replace both brushes when either is worn to about $\frac{1}{4}$ inch in length. To check length of brushes they must be removed from the unit (see instructions below). Replacement of these relatively inexpensive parts, when necessary, will keep your Sander operating more efficiently and prolong the life of the motor. **IMPORTANT—BE SURE POWER CORD IS DISCONNECTED FROM POWER SUPPLY.** To replace carbon brushes (See Fig. 5), Key No. 29, (See parts list, page 7) unscrew brush caps, Key No. 28, and remove old brush.

When replacing new brush make sure tab on brush is inserted in opening between brush tube and brush holder. Make sure curvature of brush matches curvature of the surface of the motor to which it is mated and that the brushes move freely inside brush tube. Be sure brush caps are securely tightened.

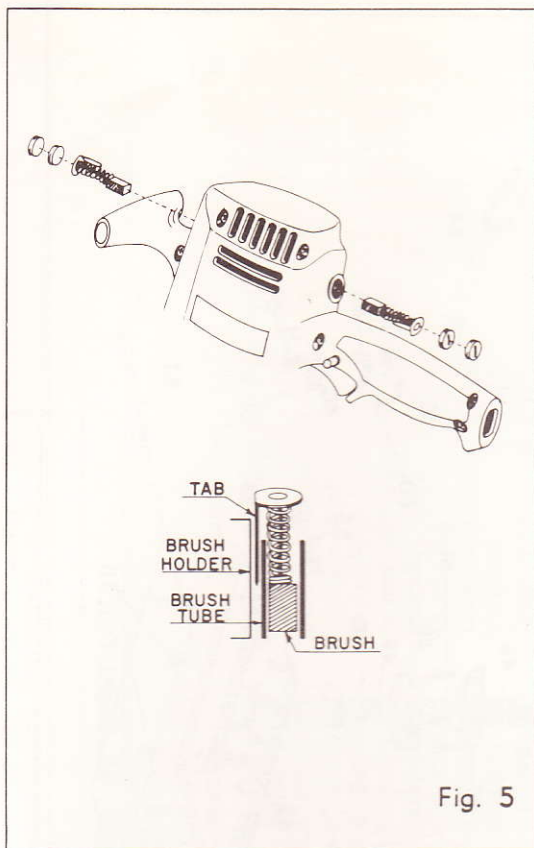
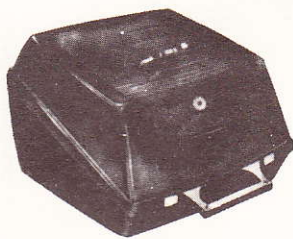


Fig. 5

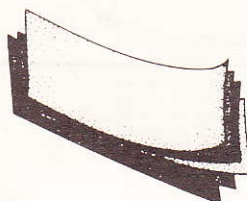
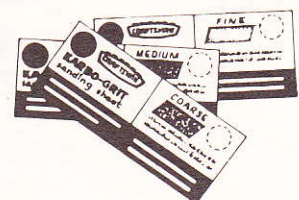
ACCESSORIES ADD GREATER VERSATILITY

CARRYING
CASELAMBS WOOL
POLISHING PAD

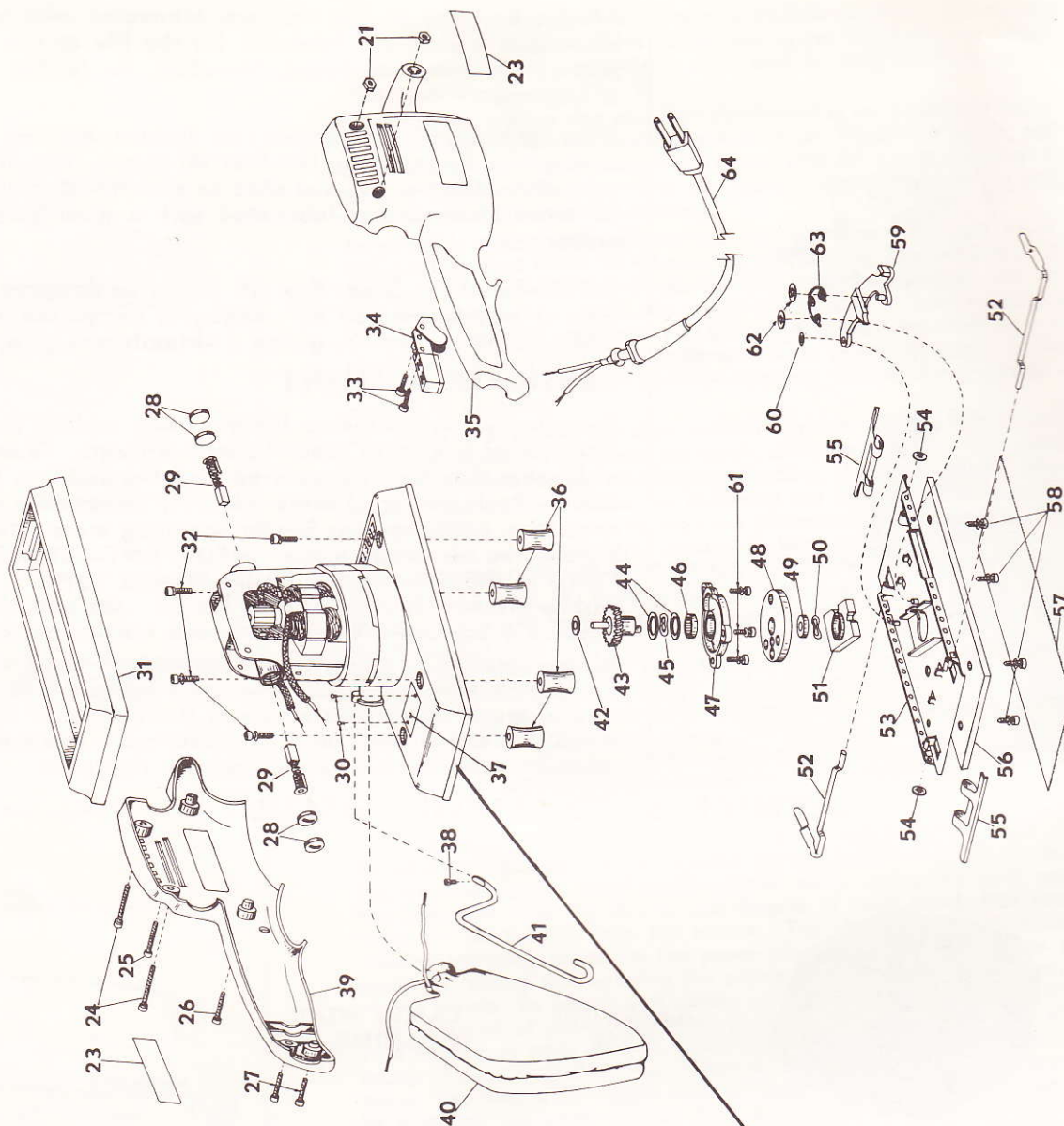
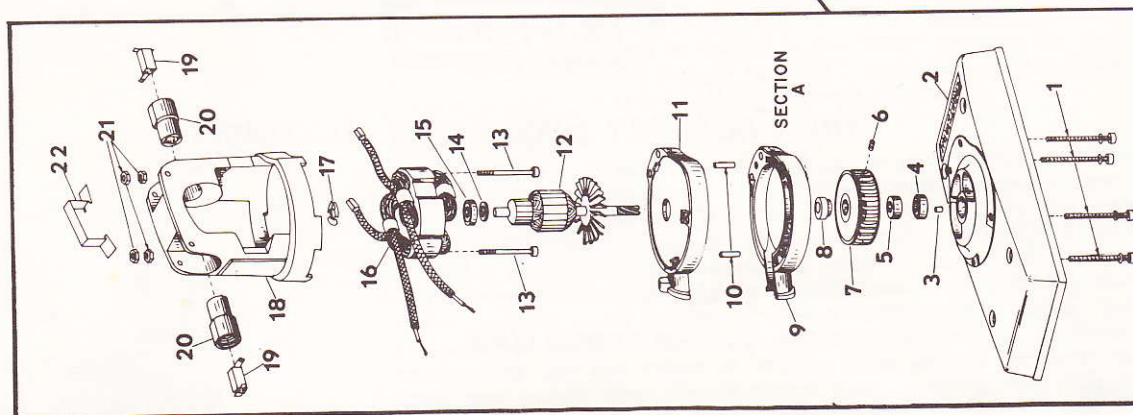
Buy Craftsman Shop Tested Accessories



CORD LOCK

ASSORTED
SANDPAPERKARBO GRIT
SANDING SHEETS

WHEN USING ATTACHMENTS ALWAYS WEAR SAFETY GLASSES AND FOLLOW MANUFACTURERS RECOMMENDATIONS AS TO THEIR USE



CRAFTSMAN SANDER—MODEL NUMBER 315.11680

The Model Number will be found on a plate attached to the Platen Housing. Always mention the Model Number in all correspondence regarding your **SANDER** or when ordering repair parts.

SEE BACK PAGE FOR PARTS ORDERING INSTRUCTIONS

PARTS LIST

Key No.	Part Number	Description	Quan.	Key No.	Part Number	Description	Quan.
1	1-940038-17	Screw (#8-32 x 1-7/8 Fil. Hd.)	4	33	1-616081-12	*Screw (#8-18 x 3/8 Pan Hd. T.C.)	2
2	4-616858-05	Platen Housing with Roller Bearing	1	34	2-606070-02	Switch	1
3	1-623019-02	Rubber Plug	1	35	5-616978-01	Handle, Right	1
4	2-620332-01	Ball Bearing (Hoover 973LOIRSL1AC2)	1	36	2-614908-02	Rubber Post	4
5	1-606314-01	Spacer	1	37	2-606151-01	Dataplate	1
6	1-930687-02	Set Screw (#8-32 x 3/16 Hex Socket Headless)	1	38	1-703432-52	Screw (#8-32 x 1/4 Fil. Hd.)	1
7	2-607114-01	Blower (Includes Key No. 6)	1	39	5-606044-01	Handle, Left	1
8	1-607184-01	Spacer	1	40	4-621920-00	Dust Bag	1
9	4-606083-04	Blower Housing, Lower (Includes Key No. 10)	1	41	2-621921-00	Dust Bag Support	1
10	1-941401-23	Roll Pin	1	42	1-606231-02	Washer	1
11	4-616993-05	Blower Housing, Upper	2	43	1-616975-01	Gear with Shaft	1
12	2-616512-01	Armature Complete	1	44	1-606231-01	Washer	2
13	1-940038-13	Screw (#8-32 x 1-9/16 Fil. Hd.)	1	45	1-620789-03	Loading Spring	1
14	1-703429-841	Washer	2	46	1-615971-04	Roller Bearing (Torrington B105)	1
15	1-621221-01	Ball Bearing (Hoover 97038RSNL1AC2)	1	47	3-616687-04	Gear Cover (Includes Key No. 46)	1
16	3-616511-01	Field Core Complete	1	48	2-607028-02	Flywheel	1
17	1-621463-03	Loading Spring	1	49	1-621585-01	Ball Bearing (Hoover 99200RSMILAC4)	1
18	3-616724-03	Motor Housing	1	50	1-620789-05	Loading Spring	1
19	2-623878-01	Brush Tube	1	51	2-621907-00	Yoke Slide	1
20	2-606093-02	Brush Holder	2	52	2-621910-00	Paper Clamp Lever	1
21	1-706404-07	Lock Nut (#8-32)	2	53	3-622779-01	Platen and Locking Lever Assembly (Includes Key Nos. 59, 60, 62 and 63)	2
22	2-606097-02	Brush Holder Clamp	2	54	1-622185-11	Retaining Washer	1
23	3-607275-01	Crown Plate	6	55	2-621908-00	Paper Clamp	2
24	1-614658-14	*Screw (#8-32 x 1-9/16 Pan Hd.)	2	56	2-622781-01	Felt Pad Assembly	2
25	1-726693-04	Screw (#8-32 x 7/8 Fil. Hd.)	2	57	**	**Sanding Sheet (4-1/2 x 11)	1
26	1-616081-03	*Screw (#8-18 x 1 Pan Hd. T.C.)	1	58	2-621653-01	Screw (#10-32 x 1/2 Special Point)	4
27	1-616081-01	*Screw (#8-18 x 5/8 Pan Hd. T.C.)	2	59	2-616600-01	Locking Lever	1
28	1-614008-01	Brush Cap	4	60	1-622167-19	Retaining Ring	1
29	2-606672-01	Brush Assembly	2	61	1-940038-35	Retaining Ring	3
30	1-795247-06	Drive Screw	2	62	1-622761-01	Screw (#8-32 x 1/2 Fil. Hd.)	2
31	3-616994-01	Dust Skirt	1	63	2-621909-00	Retaining Ring	2
32	1-940046-802	Screw (#10-32 x 1/2 Fil. Hd.)	4	64	1-606632-01	Spring	2
					EN-664	Cord Complete	1
						Instruction Sheet	1

"A"—Parts listed in this assembly are shown in the exploded view as Key Numbers 1 through 22 and represent an important part of the Double Insulated Safety System. To avoid the possibility of alteration or damage to the Safety System, service requiring these parts should be performed by a qualified service technician. Service required on these parts should be performed by your nearest Sears Electric Motor Shop. Contact your nearest Catalog Order House or Retail Store for servicing of any parts shown in Section "A".

*Standard Hardware Item—May Be Purchased Locally

**Complete Assortment Available At Your Nearest Catalog Order House or Retail Store

Sears

owners manual



REG. TRADEMARK

SANDER **DUSTLESS DUAL MOTION** **DOUBLE INSULATED**

MODEL NO.

315.11680

HOW TO ORDER REPAIR PARTS

**SEARS SERVICE
IS AT YOUR SERVICE
WHEREVER YOU LIVE
OR MOVE
IN THE U.S.A.**

The Model Number will be found on the plate attached to the platen housing. Always mention the Model Number when requesting service or repair parts for your Electric Drill.

All parts listed herein may be ordered through SEARS, ROEBUCK AND CO. and SIMPSONS-SEARS LIMITED. When ordering parts by mail, selling prices will be furnished on request or parts will be shipped at prevailing prices and you will be billed accordingly.

WHEN ORDERING REPAIR PARTS, ALWAYS GIVE THE FOLLOWING INFORMATION AS SHOWN IN THIS LIST.

1. The PART NUMBER
2. The PART DESCRIPTION
3. The MODEL NUMBER—315.11680
4. The NAME of ITEM—SANDER

All fine tools, on occasion, may require service or the replacement of parts due to wear from normal use. To prolong the life of your tool when repairs are needed, call on your nearest Sears Catalog Order or Retail Store. Please do not risk possible electrical hazards, additional cost or damage to the tool through inexperienced repairs.

Your Sears merchandise takes on added value when you discover that Sears has over 2,000 Service Units throughout the country. Each is staffed by Sears — trained, professional technicians using Sears approved parts and methods.

SEARS, ROEBUCK AND CO.—Chicago, Illinois 60607 U.S.A.
and SIMPSONS-SEARS LIMITED—Toronto